

Notice of Allowability

Application No.

09/803,418

Examiner

John Richardson

Applicant(s)

CONWAY ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's response dated May 10- 2004.
2. ☒ The allowed claim(s) is/are 21-32 and 34-36.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

MICHAEL J. JACOBSON
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE

1). An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Westerhoff (412-566-6090) on June 01 2004.

- **Claim 30**, line 2 change **having a containment structure filled with a non-condensable gas** to **having a containment filled with an incondensable gas**
- **Claim 30**, lines 7-8, change **introducing the non-condensable gas** to **introducing the incondensable gas**
- **Claim 30**, line 10, **compress the non-condensable gas** to **compress the incondensable gas**
- **Claim 30**, lines 14-15, change **allowing the compressed non-condensable gas;** to **allowing the compressed incondensable gas;**
- **Claim 32**, line 2, change **having a containment structure filled with a non-condensable gas** to **having a containment structure filled with an incondensable gas**

- **Claim 32**, lines 9-10, change **introducing the non-condensable gas** to **introducing the incondensable gas**
- **Claim 32**, line 12, change **and compress the non-condensable gas; to** **and compress the incondensable gas;**
- **Claim 32**, lines 15-16, change **allowing the compressed non-condensable gas** to **allowing the compressed incondensable gas**
- **Claim 32**, lines 16-17, replace **to push water from the suppression tank into the reactor pressure vessel** with **to push water from the suppression tank into the flood-up cavity**
- **Claim 36**, lines 1-2, change **wherein the non-condensable gas** to **wherein the incondensable gas**
- **Claim 36**, line 4, change **using the non-condensable gas** to **using the incondensable gas**
- **Specification**, 12, line 11, change **(and in-condensable gas)** to **(and incondensable gas)**

2). The following is an examiner's statement of reasons for allowance:

- The instant application is deemed to be a non-obvious improvement over the inventions patented in U.S. Patents Numbers 3,941,187, 5,053,190, and 5,102,616 and the device described in non patent literature by Matzie et al and published in Nuclear Engineering and Design 136, (1992) pages 73-83. The

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improvement comprises an integral nuclear power reactor having a containment structure with at least one steam generator mounted with the reactor core in a pool of reactor coolant and capable of operating after a loss of coolant accident so that the reactor pressure vessel pressure is lowered to a pressure less than the said containment pressure in a predictable time period (less than about 3 hours), and also that by the provision of at least one suppression tank, that in the event of a loss of coolant accident, the said reactor core is covered with water by reducing pressure in the said reactor vessel through the removal of heat by selectively transferring water from the said suppression tank to a containment flood-cavity and the said reactor vessel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3). Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Richardson whose telephone number is (703) 305 0764. The examiner can normally be reached on Monday to Thursday from 7.00 AM to 4.30 PM. The examiner can also be reached on alternate Fridays.

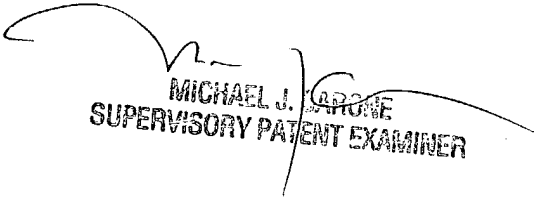
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306 4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305 7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

John Richardson, PE,

June 01 2004.


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER